



Solutia Inc.

575 Maryville Centre Drive St. Louis, Missouri 63141

P.O. Box 66760 St. Louis, Missouri 63166-6760 *Tel:* 314-674-1000

January 23, 2004

Mr. Nabil S. Fayoumi
U. S. Environmental Protection Agency - Region 5
Superfund Division
77 West Jackson Boulevard (SR-6J)
Chicago, Illinois 60604-3590

Re: Suspension Of Slurry Wall Construction

Groundwater Migration Control System Sauget Area 2 – Sites O, Q, R and S

Sauget, Illinois

Dear Mr. Fayoumi:

In recent telephone conversations with Solutia personnel, you indicated that a written plan would be required if Solutia decided to discontinue the construction of the barrier wall at the Sauget Area 2 Site.

We have reviewed the piezometric monitoring data collected at the site since the groundwater extraction system was started in July 2003 and it is apparent that since the beginning of November 2003 the groundwater has been lower than the Mississippi River level much of the time. Groundwater levels in the piezometers adjacent to the extraction wells are generally within the control tolerance of the system (set at  $\pm$  0.5 feet of the river level), except for short periods when the river level drops rapidly and the control system is adjusting the pump flows to draw down the groundwater level to match the new river level. During these transient periods of imbalance, which typically last one to two days, the groundwater level may be one or two feet above the river level. This small head differential results in a very small flow gradient (approximately 0.003 ft./ft.) and this, together with the fact that the transient period exists for only a short time, means that a negligible flux of groundwater discharges to the river during this period.

We have adjusted the control system to a lower range, which we expect will increase the time that groundwater levels are below river level. We will take further actions as may be necessary to maintain control during these transient periods.

Due to Solutia's cash position resulting from filing for reorganization under chapter 11 of the US Bankruptcy Code and because of the active groundwater pumping program underway, unless Pharmacia or another PRP makes substantial contribution towards completion of the work,, Solutia can only complete that section of the wall for which the excavation is complete. Solutia would then suspend further wall construction and close

the site. The attached plan describes the procedures that we propose to implement at the site to accomplish that goal.

-2-

We believe that these procedures will result in safe closure of the site. The end result will be the completion of the majority of the section of wall that acts as a barrier to groundwater flow into the river and, more importantly, that limits the amount of river water drawn into the extraction system during periods of high withdrawal.

Please review these proposed site closure procedures and provide us with any comments you may have. If you have any questions, please do not hesitate to call.

Sincerely,

Solutia Inc.

Gary W. Vandiver Project Coordinator

cc: Ken Bardo - USEPA

Cathy Bumb - Solutia Peter Barrett - CH2M Hill

Steve Smith - Solutia

Sandra Bron - IEPA

Richard Williams - Solutia

Bruce Yare - Solutia

- Demobilize all equipment not required for backfilling the excavated trench. Specifically, two of the three clamshell excavators and the long reach backhoe (the Koehring 1266) will be removed from the site, together with miscellaneous support equipment such as chisels, spare parts, spare clamshell buckets, etc. The third clamshell excavator will be demobilized as soon as it completes cleaning the bottom of the excavated trench.
- Cleaning and backfilling the trench section already excavated. As of now, the section of the slurry trench between the southwest corner (Station 10+50) and Station 26+10 has been excavated to the top of bedrock. This represents approximately 75 percent of the north-south leg of the barrier. When this portion of trench is backfilled, the majority of the wall that will intercept groundwater flow to the river will be in place. Of the remaining 510 feet of the north-south leg, a triangular section 140 feet deep and 140 feet long along the ground surface has already been backfilled, since this section was excavated at the start of the project as the lead-in slope for backfill placement.
  - To date, a total of 224,000 square feet of trench has been excavated to the top of bedrock. Of this, approximately 96,650 square feet have been backfilled with material that satisfies the project specifications. We propose to backfill the rest of the open trench with similar material that will also satisfy the specifications. The same level of Quality Assurance and Quality Control that has been exercised thus far on the project will be used to complete the backfill.
- Stabilization of any surplus bentonite slurry. We estimate that approximately 17,000 cu. yd. of slurry will be left after the backfill placement is complete. It is proposed that the surplus slurry be placed in the low area between the work platform that runs along the north-south leg of the barrier wall and the western edge of the Site R landfill. Material stored in this area will be contained by the landfill slope on one side, by the work pad on the opposite side, and by berms to be constructed on the north and south sides of the storage area. The slurry will be stabilized by a mixture of air drying to reduce the liquid volume and by mixing with soil and, possibly, with pozzolanic bottom ash imported from an off site source. Once the slurry is stabilized, it will be covered with at least six inches of clean soil.
- Cleaning up and covering the disturbed areas of the site. The site will be graded to promote surface drainage to the channels that existed prior to construction and these channels will be reconstructed where necessary. The disturbed areas of the site will then be covered with six inched of clean soil imported from an off site

borrow source. This soil cover will be seeded when completed. At the same time, a three foot thick soil cover will be constructed over the slurry wall alignment to protect the wall from damage.

- Construction of a temporary cover over the spoil containment area. The spoils that remain on the top of the landfill after the trench is backfilled will be graded to drain and will be covered with a scrim reinforced PVC temporary cover. A similar temporary cover has been in place on the TSCA containment cell in Area 1 for the past two years and has successfully prevented percolation of rainfall and snowmelt into the sediments stored in the cell.
- Maintenance of stormwater erosion control measures. Until the ponded slurry is stabilized and a clean soil cover has been placed over the disturbed areas, stormwater runoff will be managed at the site. This will include collection of water that comes into contact with uncovered slurry and treatment of that collected water. Stormwater control measures described in the Site Stormwater Pollution Prevention Plan will be constructed and maintained. This plan was submitted to the Agencies on October 15, 2003.